Specification Sheet

Project: 202509-1696

Date: 09/09/25

Contact:
Direct Line:

Plate & Frame Heat Exchanger

Version: 4.19.16 (20/1/4)

Item:	**Unit: F 4206-23-1-NH**

Technical data per HX		Hot side			Cold side	
Fluid		**Water**			**Water**	
Mass flow rate		[kg/s]	2.79		[kg/s]	16.77
Volume flow rate		[m³/h]	10.379		[m³/h]	61.762
Inlet temperature		[°C]	100.00		[°C]	65.00
Outlet temperature		[°C]	70.00		[°C]	70.00
Operating pressure		[barg]	2.00		[barg]	2.00
Physical properties			In	Out	In	Out
Dynamic viscosity		[cP]	0.280	0.404	0.434	0.404
Density		[kg/m³]	958.4	976.4	979.0	976.4
Specific heat capacity		[kJ/kgK]	4.194	4.174	4.173	4.174
Thermal conductivity		[W/mK]	0.659	0.649	0.647	0.649

P.H.E characteristic values

Heat duty	[kW]		350.00		
Eff. heat transfer area	[m²]		4.38		
Log./Effective temperature difference	[K]		13.95 / 13.95		
Heat transfer coeff. req./act.	[W/m²K]		5721 / 6195		
Fouling factor total	[m²K/W]		0.0000134		
Overdesign	[%]		8.29		
Pressure loss	[kPa]	1.921		[kPa]	65.731
Channel Velocity	[m/s]	0.22 / 0.35		[m/s]	1.15 / 2.02
Connection Velocity	[m/s]	0.55		[m/s]	3.29
No. of passes in series		1			1
No. of plates total			23		
Mix of Channeltype			4*HL + 7*LL		

Construction

Weight Dry/Wet		[kg]		approx. 600/613	
Volume		[dm³]	6.195		6.195
Design pressure		[barg]		25.0	
Max. working temperature		[°C]		110.00	
Material		DIN			
	Plates	AISI 316L / 1.4404 (0.60 mm)			
	Gaskets	NBR HT			
	Frame	S 355 J2+N (Pressure Plates), max. plates: 80, Extensibility 248%			
	Painting	Standard, RAL 5002, <= 150°C,			
Connection	Hot side	F1 => F4 : Metal Liner, DN 80, Stainless steel, for flange PN 40, EN 1092-1			
	Cold side	F3 => F2 : Metal Liner, DN 80, Stainless steel, for flange PN 40, EN 1092-1			
Design Code		AD-2000			
Inspection Code		PED 2014/68/EU			

Remark

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Technical data per HX	Hot side			Cold side	
Fluid	**Water**			**Water**	
Mass flow rate	[kg/s]	2.79		[kg/s]	16.77
Volume flow rate	[m³/h]	10.379		[m³/h]	61.309
Inlet temperature	[°C]	100.00		[°C]	50.00
Outlet temperature	[°C]	70.00		[°C]	55.00
Operating pressure	[barg]	2.00		[barg]	2.00
Physical properties		In	Out	In	Out
Dynamic viscosity	[cP]	0.280	0.404	0.549	0.506
Density	[kg/m³]	958.4	976.4	986.1	983.8
Specific heat capacity	[kJ/kgK]	4.194	4.174	4.174	4.173
Thermal conductivity	[W/mK]	0.659	0.649	0.640	0.642

P.H.E characteristic values

Heat duty	[kW]		350.00		
Eff. heat transfer area	[m²]		4.38		
Log./Effective temperature difference	[K]		30.83 / 30.83		
Heat transfer coeff. req./act.	[W/m²K]		2589 / 5903		
Fouling factor total	[m²K/W]		0.0002168		
Overdesign	[%]		128		
Pressure loss	[kPa]	2.016		[kPa]	67.794
Channel Velocity	[m/s]	0.22 / 0.35		[m/s]	1.16 / 2.00
Connection Velocity	[m/s]	0.55		[m/s]	3.26
No. of passes in series		1			1
No. of plates total			23		
Mix of Channeltype			4*HL + 7*LL		

Construction

Weight Dry/Wet		[kg]		approx. 600/613	
Volume		[dm³]	6.195		6.195
Design pressure		[barg]		25.0	
Max. working temperature		[°C]		110.00	
Material		DIN			
	Plates	AISI 316L / 1.4404 (0.60 mm)			
	Gaskets	NBR HT			
	Frame	S 355 J2+N (Pressure Plates), max. plates: 80, Extensibility 248%			
	Painting	Standard, RAL 5002, <= 150°C,			
Connection	Hot side	F1 => F4 : Metal Liner, DN 80, Stainless steel, for flange PN 40, EN 1092-1			
	Cold side	F3 => F2 : Metal Liner, DN 80, Stainless steel, for flange PN 40, EN 1092-1			
Design Code		AD-2000			
Inspection Code		PED 2014/68/EU			

Remark

Construction sheet

Project:

Date: 09/09/25

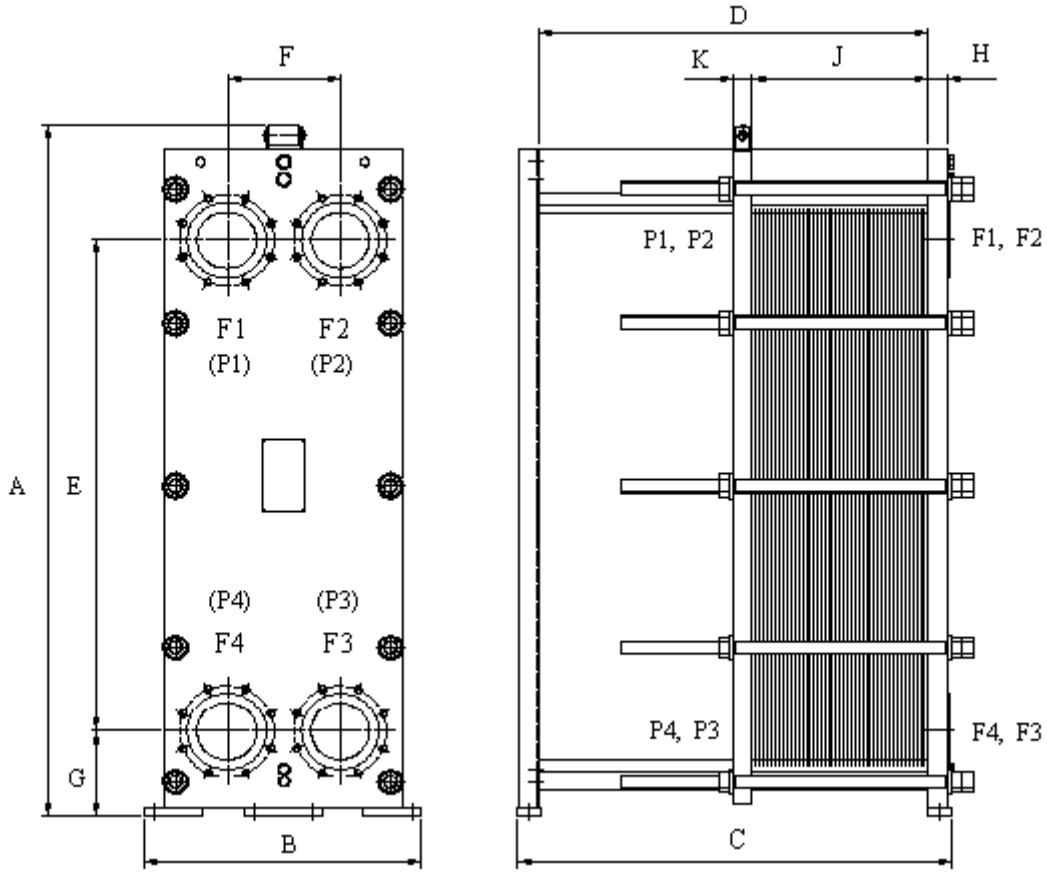
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Plate & Frame Heat Exchanger

Version: 4.19.16 (20/1/4)

Item:	**Unit: F 4206-23-1-NH**

Dimensional sketch - not Certified



Dimensions [appr. mm, inch], max. no. of plates 80		**:mm**	**:inch**
A:	Total height	:1157	:45.6
B:	Total width	:570	:22.4
C:	Total length	:621	:24.4
D:	Length of carrier bar	:495	:19.5
E:	Distance between connections, vertical	:719	:28.3
F:	Distance between connections,horizontal	:225	:8.9
G:	middlepoint of connection from the ground	:204	:8.0
H:	Thickness of frame plate	:40	:1.6
K:	Thickness of pressure plate	:35	:1.4
J:	Length of the plate-package	:71.3	:2.8

Connections

Hot side: F1 => F4 :
Rubber Liner, DN 100,
NBR, for flange PN 16, EN 1092-1

Cold side: F3 => F2 :
Rubber Liner, DN 100,
NBR, for flange PN 16, EN 1092-1

Preliminary Dimensions